## UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF TEXAS WACO DIVISION

SOLAS OLED LTD.,

Plaintiff,

Case No. 6:19-cv-00236-ADA

v.

LG DISPLAY CO., LTD., LG ELECTRONICS, INC., and SONY CORPORATION,

Defendants.

**SOLAS'S OPENING CLAIM CONSTRUCTION BRIEF** 

# TABLE OF CONTENTS

I.	IN	NTRODUCTION	1
II	. B.	ACKGROUND OF ASSERTED PATENTS	2
	A.	U.S. Patent No. 7,907,137 ("'137 Patent")	2
	B.	U.S. Patent No. 7,432,891 ("'891 patent")	2
	C.	U.S. Patent No. 7,573,068 ("'068 Patent")	3
II	I.	CLAIM CONSTRUCTION PRINCIPLES	3
I	<i>7.</i>	DISPUTED TERMS FOR '137 PATENT	5
	A.	"a gradation current having a current value" ('137 patent claims 10, 36)	5
	B.	"gradation signal" ('137 patent claims 10, 15, 36, 37, 39 )	8
	a pre	"generates, as the gradation signal, a non-light emitting display voltage having a determined voltage value" ('137 patent claim 15) "a non-light emitting display voltage have determined voltage value for allowing the optical element to perform a non-light emitting tration is generated as the gradation signal ('137 patent claim 39)	g
		" through a data line through the data line through the data line"" ('137 patent ns 10, 16)	13
	E.	"before" ('137 patent claim 10) / "after" ('137 patent claim 36)	. 15
V.	<b>D</b>	ISPUTED TERMS FOR '891 PATENT	.15
	mea: prov	"a third thin film transistor which during driving its gate through a driving conductor tap le driving current at an output of said first current-driving transistor and supplies a current suring- and voltage regulating circuit, said current measuring- and voltage regulating circ viding to the data conductor a voltage signal which is dependent on a current measuring lt and a voltage comparison" ('891 patent claims 10, 15, 36, 37, 39)	nt uit
	B.	"current measuring" ('891 patent claims 1, 3)	17
	C. said	"wherein all above mentioned elements of the driving circuit are located at a same side o light emitting diode" ('891 patent claim 3)	
V	I.	DISPUTED TERMS FOR '068 PATENT	.22
		"formed on said plurality of supply lines along said plurality of supply lines" ('068 patent in 1) "connected to said plurality of supply lines along said plurality of supply lines" ('068 int claim 13)	
	pate		
	pate B.	"patterned" ('068 patent claims 1, 13)	
	-	•	24
	B.	"patterned" ('068 patent claims 1, 13)	24 26

## TABLE OF EXHIBITS AND ABBREVIATIONS

Ex 1	<b>Document Description</b>	Abbreviation
1	Declaration of Richard A. Flasck in support of Solas's opening claim construction brief	Flasck. Decl.
2	U.S. Patent No. 7,907,137	'137 patent
3	U.S. Patent No. 7,432,891	'891 patent
4	U.S. Patent No. 7,573,068	'068 patent
5	Parties' joint revised list of terms/constructions dated March 6, 2020	Joint Chart
6	Microsoft Computer Dictionary (3rd ed., 1997), definition of "signal"	MS Dict.
7	McGraw-Hill Dictionary of Scientific and Technical Terms (4th ed., 1989), definition of "data transmission line"	McGraw-Hill
8	Merriam-Webster Dictionary (avail. at www.merriam-webster.com, accessed Feb 2020), definitions of "along" and "together"	Merriam- Webster
9	Dictionary.com (avail. at www.dictionary.com, accessed Feb. 2020), definitions of "along" and "together"	Dictionary.com
10	Defendant LG Display's petition for <i>inter partes</i> review in IPR2020-00177 on the '891 patent	'891 IPR Pet.
11	Defendant LG Display's expert declaration by Dr. Hatalis in <i>inter</i> partes review in IPR2020-00177 on the '891 patent	'891 IPR Decl.
12	U.S. Patent No. 5,106,652	'652 patent
13	U.S. Patent No. 5,981,317	'317 patent
14	U.S. Patent Appl. Pub. No. 2002/0101172	'173 app. pub.
15	U.S. Patent No. 7,250,722	'722 patent

<sup>&</sup>lt;sup>1</sup> All exhibits attached to the concurrently filed declaration of Neil A. Rubin.

## I. <u>INTRODUCTION</u>

Plaintiff Solas OLED Ltd. ("Solas") and Defendants LG Display Co., LTD., LG Electronics, Inc., and Sony Corporation (collectively, "Defendants") offer not just competing claim-construction proposals but completely different approaches to claim construction.

In each case, Solas's claim term proposals stay faithful to the plain meaning and narrow from that plain meaning only when necessary under controlling Federal Circuit law or when helpful to narrow the disputes for the Court. Solas's proposals are also the only ones that are faithful to the full scope of the intrinsic record—and the only ones that are supported by expert opinion on what a person of skill in the art would understand the terms to mean in light of the intrinsic and extrinsic record.

Defendants' proposals, on the other hand, ask this Court to recharacterize and burden clear terms by importing artificial and extraneous baggage, but Defendants cannot point to any clear or unmistakable disclaimer or lexicography to support those importations, which invites reversible error. *E.g., JVW Enters. v. Interact Accessories, Inc.*, 424 F.3d 1324, 1335 (Fed. Cir. 2005). Indeed, in many cases, Defendants actually import negative limitations, but those are only appropriate where the limitation is expressly disclaimed or where independent lexicography in the written description" justifies adding it. *Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1322-23 (Fed. Cir. 2003). And that is not the case here. To the contrary, many of Defendants' proposals are inconsistent with—and even exclude—embodiments taught in the specification. Such constructions are "rarely, if ever, correct." *SanDisk Corp. v. Memorex Prods.*, 415 F.3d 1278, 1285-86 (Fed. Cir. 2005). For other proposals, Defendants' proposed constructions are inconsistent with the claim language itself. These are also improper under controlling law—and do nothing to help any fact-finder, but rather only make that job more difficult. They should be rejected.

## II. <u>BACKGROUND OF ASSERTED PATENTS<sup>2</sup></u>

### A. U.S. Patent No. 7,907,137 ("'137 Patent")

The '137 patent concerns driving circuitry for self-luminous displays that emit light due to the current flowing through pixel elements, such as displays utilizing organic electroluminescent or LED elements. '137 patent at 1:17–26, 36–43. The current flowing through such devices is commonly controlled by a gate voltage on a drive transistor. *Id.* at 3:15–30. But the relationship between the gate voltage and the current may change "depending on the usage time, the drive history and the like," and in particular the minimum "threshold voltage" on the gate necessary to permit current flow may shift. *Id.* The '137 patent provides structures and methods for driving the pixel circuits that solve problems in the prior art, including by detecting the threshold voltage for each pixel and applying a "compensation voltage" that compensates for such differences in such threshold voltages. *Id.* at 3:59–65, Fig. 1.

## B. U.S. Patent No. 7,432,891 ("'891 patent")

The '891 patent concerns an active matrix drive circuit with current feedback for an organic light-emitting diode (OLED) image seen.'891 patent at Abstract, 1:5–61. The patent addresses a well-known problem with such circuits: "manufacturing-dependent fluctuations of the parameters of the thin film transistors" affect the amount of current provided to each OLED. *Id.* These differences may cause OLEDs to emit different amounts of light. *Id.* 

Prior-art solutions used feedback to compensate for differences in drive transistors but used at least four transistors in the drive circuit, and/or drive circuit elements on both sides of the diode, making manufacturing difficult. *Id.* at 2:22–31, 2:45–53. The '891 patent solves the problem by disclosing a novel drive circuit that requires "only three thin film transistors" and a "current

2

<sup>&</sup>lt;sup>2</sup> For further technology background *see* Flasck Decl. ¶¶ 21–47.

measuring and voltage regulating circuit" to compensate for any deviations. *Id.* at 2:9–31.

This drive circuit "avoids the disadvantages of the prior art" and "requires less components and is simpler to manufacture than the known circuits." *Id.* at 1:58–63. In particular, the OLED, due to its non-linear switching characteristics acts like a switch, so "no separate switch must be provided for the current." 2:19–26. This structure allows all circuit parts to be located at one side of the diode, "so that a conventional layer sequence can be used during manufacture." *Id.* Further, no contacts need to be guided through the organic material of the diode. *Id.* at 2:27–31.

### C. U.S. Patent No. 7,573,068 ("'068 Patent")

The '068 patent concerns improved designs for transistor array substrates, containing an array of "driving transistors" and associated lines and interconnections necessary to their operation. Such arrays of driving transistors are needed, for example, to drive active matrix displays utilizing organic electroluminescent elements. '068 patent at 1:24–36.

In prior art arrays, the materials, dimension, and arrangement of the transistor components and the lines and interconnections meant that the arrays suffered from undesirably large resistances and voltage drops, impairing the operation of driving transistors and the quality of the displayed image. The '068 patent teaches and claims improved designs for transistor arrays, with different arrangements of transistors, lines, interconnections, and electrodes, as well as with different dimensions or materials for such structures than those used in the prior art. '068 patent, Fig. 5.

#### III. <u>CLAIM CONSTRUCTION PRINCIPLES</u>

The "claim construction inquiry . . . begins and ends in all cases with the actual words of the claim." *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1324 (Fed. Cir. 2002). Indeed, "the claims themselves provide substantial guidance as to the meaning of [] terms." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005).

Thus, when conducting a claim construction inquiry, "district courts are not (and should not be) required to construe every limitation present in a patent's asserted claims." *O2 Micro Int'l v. Beyond Innovation Tech.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008). This is because claim construction is "not an obligatory exercise in redundancy." *US Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997). Where a term is used in accordance with its plain meaning, the court should not replace it with different language. *Thorner v. Sony Computer Ent. Am. LLC*, 669 F.3d 1362, 1366-67 (Fed. Cir. 2012) ("we do not redefine words. Only the patentee can do that.").

To the contrary, there is a "heavy presumption" that claim terms carry their "full ordinary and customary meaning, unless [the accused infringer] can show the patentee expressly relinquished claim scope." *Epistar Corp. v. ITC*, 566 F.3d 1321, 1334 (Fed. Cir. 2009). Because that plain meaning "is the meaning that the term would have to a [POSITA] in question at the time of the invention," construing claims often "involves little more than the application of the widely accepted meaning of commonly understood words." *Phillips*, 415 F.3d at 1313-14.

"There are only two exceptions" in which claim terms are not given their full ordinary and customary meaning: "1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee disavows the full scope of a claim term either in the specification or during prosecution." *Thorner*, 669 F.3d at 1365. Without clear and unambiguous disclaimer or lexicography, courts "do not import limitations into claims from examples or embodiments appearing only in a patent's written description, even when a specification describes very specific embodiments of the invention or even describes only a single embodiment." *See JVW Enters.*, 424 F.3d at 1335. Similarly, a statement during patent prosecution does not limit the claims unless the statement is a "clear and unambiguous disavowal of claim scope." *Omega Eng'g*, 334 F.3d at 1325.

## IV. <u>DISPUTED TERMS FOR '137 PATENT</u>

## A. "a gradation current having a current value" ('137 patent claims 10, 36)

Solas's Proposed Construction <sup>3</sup>	Defendants' Proposed Construction
a current having a current value and conveying information about a level	an actual current (not voltage) with a value corresponding to a luminance level

Defendants improperly seek to import a negative limitation ("not voltage") into a term ("current") that requires no construction. Because there is no basis in the specification or other intrinsic record for such a negative limitation, Defendants' construction should be rejected. *See Linear Tech. Corp. v. Intl. Trade Comm'n.*, 566 F.3d 1049, 1059–60 (Fed. Cir. 2009) (rejecting construction of "monitoring the current to the load" that excluded "monitoring voltage"); *Cohesive Techs., Inc. v. Waters Corp.*, 543 F.3d 1351, 1367 (Fed. Cir. 2008) ("it is not appropriate for the court to construe a claim solely to exclude the accused device"); Flasck Decl. ¶¶ 56–66.

The parties do not dispute that a "gradation current" must be a current. They also do not appear to dispute what the phrase "having a current value" means. Solas proposes that this portion of the term be left without any construction beyond its plain meaning. Defendants' proposal, on the other hand, effectively replaces it with the phrase "with a value." Since Defendants do not appear to be suggesting that this "value" can be something other than a "current value," this change does not appear to have any substantive effect. This replacement of the patentee's chosen phrase is neither supported by the intrinsic record nor helpful to the finder of fact.

Solas's proposal explains that the gradation current "convey[s] information about a level."

This matches the purpose of the gradation current in the larger claim element: "a gradation current having a current value for allowing the optical element to perform a light emitting operation at a

<sup>&</sup>lt;sup>3</sup> Solas proposed that "gradation current" means "current conveying information about a level" (Joint Chart at 2), which is equivalent to this proposal for the longer term.

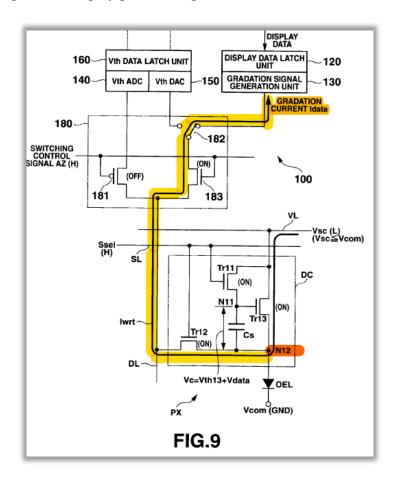
luminance corresponding to a luminance gradation of display data." '137 patent at 58:5–8, 62:55–59. Defendants' proposal instead says that the gradation current "correspond[s] to a luminance level." This is at best duplicative of the claim language "corresponding to a luminance gradation" and of the parties agreed construction for "luminance gradient" of "light emitting level." Solas's language actually explains what the "gradation current" is, rather than parroting other claim limitations, and should be adopted. Flasck Decl. ¶

The central difference between the proposals is that Defendants replace the word "current" with "actual current (not voltage)." Notably, Defendants do not attempt to explain or define what a current is. They simply ask the Court to instruct the jury that "current" really, really means current and cannot include an inextricably intertwined property, "voltage." Flasck Decl. ¶ 59, Background. Nothing in the intrinsic record distinguishes "actual" current from any other kind of current, and so it is unclear how the finder of fact is supposed to distinguish the "actual" currents from all of the other currents in the world that do not live up to that label.

Defendants' negative limitation "(not voltage)" seems clearer, but nothing in the intrinsic record supports excluding embodiments that otherwise satisfy the "gradation current" limitations, simply because those embodiments also involve a voltage. Indeed, adopting Defendants' proposed construction would invite non-infringement arguments that also improperly exclude embodiments.

For instance, Fig. 9 (portion) shows an embodiment while the "gradation current *Idata*" is flowing. Each of elements 182, 183, and Tr12 act as switches ('137 patent at 12:52, 22:7–8) and is "on," directly connecting the "gradation signal generation unit" 130 via "drive line" DL to contact point N12 within the "drive circuit" DC. Further, the specification teaches that "the gradation current Idata is drawn via the data line DL, *whereby a voltage . . . is applied to the side of the source terminal* (the contact point N12 . . . ." *Id.* at 22:20:25. Thus, when the gradation

current flows, the gradation signal generation unit in this preferred embodiment supplies *both a* current and a voltage to the display pixel through the data line.



Claim 10 requires that the gradation signal generation circuit "generates a gradation current" and "supplies the gradation current." '137 patent at 58:5–6, 10–11. Under Defendants' proposal, the gradation signal generation circuit would need to generate and supply a "current (not voltage)." This improperly excludes the "gradation signal generation unit" of the preferred embodiments that generates and supplies both current and voltage. Flasck Decl. ¶¶ 63–65.

Defendants' proposal risks excluding preferred embodiments in other ways. The same preferred embodiment in Fig. 9 can also operate in a "Non-Light Emitting Operation" phase where it also "suppl[ies] a non-light emitting display voltage Vzero." '137 patent at 25:55, 27:3–15. To

the extent Defendants' proposal prohibits the gradation signal generation circuit from ever supplying a voltage, this operation of Fig. 9 and preferred embodiment is excluded as well.

Indeed, the purpose of the gradation current in the preferred embodiments is to provide an appropriate "gradation voltage" that is applied to the gate of the drive transistor and directly controls the light emitted by the pixel. '137 patent at 2:49–52, 11:4–13. In the preferred embodiment, the gradation current supplies the electric charges to charge a capacitor with "the voltage component Vdata appropriately corresponding to the gradation signal (display data)." *Id.* at 22:37–54. The patent describes this latter process as "a current/voltage conversion function." *Id.* at 24:38–39. And the gradation current itself was initially generated by converting a digital signal to an analog voltage and then applying a "voltage-current converter." *Id.* at 10:60–11:3.

These teachings confirm that the "gradation current" of the preferred embodiments is generated by converting a voltage, is delivered together with a voltage, and exists to create a gradation voltage signal in the display pixel. Given this intimate relationship between the gradation current and related voltages in the preferred embodiments, Defendants' proposal will—at best—confuse the jury. At worst, it invites reversible error by excluding several preferred embodiments.

## B. <u>"gradation signal" ('137 patent claims 10, 15, 36, 37, 39 )</u>

Solas's Proposed Construction	Defendants' Proposed Construction
signal conveying information about a level	a gradation <u>current</u> with a current value <u>sent</u> <u>to a pixel to set a luminance gradation</u>

Solas's proposal properly explains the plain meaning of this term, in the context of the patent and claims in which is appears. The claim explains that the gradation signal "correspond[s] to the luminance gradation of the display data" '137 patent at 58:9–10. And the parties agree that "luminance gradation" means "light emitting level." Solas's construction helps the fact-finder understand "gradation," which might otherwise be an unfamiliar term. Flasck Decl. ¶¶ 63–73.

Defendants' proposal is unhelpful at best. It incorporates by paraphrase requirements that appear elsewhere in the claims such as the requirement that the "gradation current" be "supplie[d] ... to the display pixel" or that it be related to the "luminance gradation." '137 patent at 58:9–12. This is unnecessary and confusing. It is also wrong. It improperly adds the requirement that the "gradation signal" *must* be a "gradation current" and have a "current value." That contradicts the patent specification and excludes embodiments. Such constructions are "rarely, if ever, correct." *SanDisk Corp.*, 415 F.3d at 1285–86.

Although the claims require generating and/or supplying "a gradation current . . . as a gradation signal." ('137 patent 58:5–12, 62:55–60), that does not mean that a "gradation signal" as used in the '137 patent *must be* a gradation current. If anything, this claim language suggests the opposite, because if a "gradation signal" is necessarily a "gradation current," there would be no reason to use both terms in the same claims.

Directly contradicting Defendants' proposal, the specification provides examples of "gradation signals" that are voltages—and does so repeatedly. This is strong evidence that the term "gradation signal" is not limited to currents. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005) ("the specification . . . is the single best guide to the meaning of a disputed term" (quotations omitted)). For example, Fig. of the patent has the label "gradation signal (gradation current / non-light emitting display voltage)." The specification has about one dozen other references to the "non-light emitting display voltage" as a "gradation signal." *See* '137 patent at 4:31–32, 5:38–39, 7:55–56, 10:47–52, 12:11–12, 13:2–4, 26:12–14, 29:57–58, 30:19–20, 31:29–30, 34:54–55, 36:23–25, 39:55–57, 46:25–26, 48:27–28, 51:25–26. *See* Flasck Decl. ¶¶ 72–73.

C. "generates, as the gradation signal, a non-light emitting display voltage having a predetermined voltage value" ('137 patent claim 15) "a non-light emitting display voltage having a predetermined voltage value for allowing the optical element to perform a non-light emitting operation is generated as the gradation signal ('137 patent claim 39)

Solas's Proposed Construction	Defendants' Proposed Construction
Not indefinite	indefinite

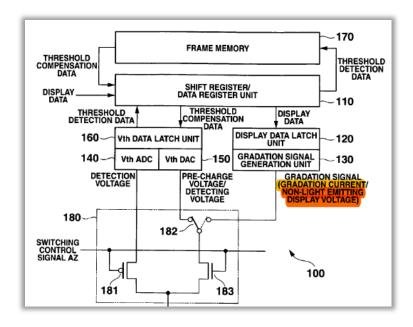
Under controlling law, a claim is only indefinite if Defendants can prove by clear and convincing evidence, that the claims, when read in light of the specification and prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention. *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 898–899 (2014).

Defendants' fall far short of that burden here. In their invalidity contentions and claim construction exchanges, Defendants did not include one word articulating why they believe these dependent claim terms are clearly and convincingly indefinite. After several demands by Solas, Defendants finally stated over in call that these claims were indefinite because they were in tension with the independent claims from which they depend, with no additional detail. Defendants are incorrect and the term is not indefinite to a POSITA. *See* Flasck Decl. ¶¶ 74–81.

Though Defendants have been improperly reserved in explaining their position, it appears they rest on the false premise put forward in their proposal regarding "gradation signal." That is, in Defendants' view, because the "gradation signal" must be a "gradation *current*" in the independent claims, then it cannot be a "non-light emitting display *voltage*" in the dependent claims. To the contrary, the term "signal" is generally understood to cover "any electrical quantity, such as voltage, current or frequency, that can be used to transit information." MS Dict.

Defendants' contention has several fatal flaws. *First*, it contradicts the clear teachings of the patent specification. In those teachings, the specification makes clear that the "gradation signal

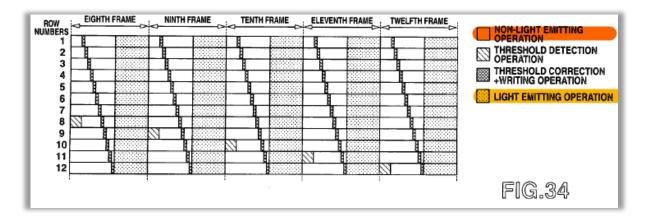
generation circuit can generate a "gradation current" and a "non-light emitting display voltage." Indeed, Fig. 1 (portion) makes this much clear visually:



Adding to this obvious point made by Fig. 1, the specification about a dozen times makes clear that the "gradation signal generation circuit" provides signals—and that those signals convey the "gradation current" for a "light-emitting operation" and a voltage for a "non-light emitting operation." This is confirmed by the "Summary of the Invention" section alone (*id.* at 7:41–59):

The optical element preferably comprises a light emitting element which performs a light emitting operation at a luminance corresponding to a current value of a current applied. The operation of holding the voltage component based on the gradation signal includes: in the case where the light emitting 45 element of said each display element is allowed to perform a light emitting operation at a luminance corresponding to a gradation luminance of display data, generating, as the gradation current, a gradation current having a current value for allowing the optical element to perform a light emitting 50 operation at a luminance corresponding to the gradation luminance of the display data, and supplying the gradation current to the display pixel; and in the case where the light emitting element of said each display pixel is allowed to perform a non-light emitting operation, generating, as the gradation 55 signal, a non-light emitting display voltage having a predetermined voltage for allowing the optical element to perform a non-light emitting operation, and supply the non-light emitting display voltage to the display pixel.

The detailed description reiterates this point and elaborate on it in various embodiments. *See id.* at 28:16–33. And Fig. 34 (portion) also illustrates the same concept, removing any doubt:



On and on the specification goes. Indeed, as cited above, the specification has about one dozen other references to the "non-light emitting display voltage" as a "gradation signal." Thus, any argument that the "gradation signal generation circuit" cannot issue signals that both provide a gradation current and provide a non-light emitting display voltage is plain wrong

Second, any reasonable reading of the claims themselves proves there is no tension between the dependent and independent claims. Rather, the claims are fully consistent with all these intrinsic-record teachings. For example, independent claim 10 introduces the first aspect of the signals generated by the gradation circuit for a "light-emitting operation:"

a gradation signal generation circuit which generates a gradation current having a current value for allowing the optical element to perform a light emitting operation at a luminance corresponding to a luminance gradation of the display data, as a gradation signal corresponding to the luminance gradation of the display data, and supplies

Perfectly consistent with the intrinsic record, dependent claim 15 then introduces the second aspect, for the "non-light emitting operation":

15. The display drive apparatus according to claim 10, wherein the gradation signal generation circuit includes a circuit which generates, as the gradation signal, a non-light

emitting display voltage having a predetermined voltage value for allowing the optical element to perform a non-light emitting operation.

Third, Defendants' arguments also defy scientific principles underlying fundamental concepts in this patent. That is: any gradation signal would have a current component and some voltage value—and the two items are inextricably and mathematically intertwined. Flasck Dec. ¶ 80. Indeed, due to this relationship, in ideal circuits, if you have one value, you could solve for the other. Thus, there is no basis for Defendants false premise that current can give no indication of voltage and voltage should give no indication of current.

In short, a POSITA would immediately and easily understand the scope of dependent 15 and 39. They are not indefinite.

D. "... through a data line... through the data line... through the data line" ('137 patent claims 10, 16)

Solas's Proposed Construction	Defendants' Proposed Construction
plain and ordinary meaning. "a data line" means "one or more data lines." The antecedent basis for "the data line" is "a data line."	the gradation current is supplied, the threshold voltage is detected, and the compensation voltage is applied through the same data line

Defendants do not propose an actual construction for this term. Defendants' "construction" is a statement of requirements that would not make sense when inserted into the claim. This is improper and confusing, and should be rejected for this reason alone.

As to the term "though a data line," Defendants agree that "through" and "data line" do not require construction by repeating them in their proposal. Indeed, these are common technical terms that would be readily understood by a POSITA. Flasck Decl. ¶¶ 82–86; McGraw-Hill ("data

transmission line: [ELEC] A system of electrical conductors, such as a coaxial cable or pair of wires, used to send information from one place to another or one part of a system to another."). Instead, the only substantive dispute is whether "a data line" is limited to "a *single* data line" (as Defendants imply) or whether it is "one or more data lines" (under Solas's construction). Under basic patent law, as well as the intrinsic and extrinsic evidence, Solas's construction is correct.

Here, the intrinsic record supports the conventional rule, and this is not a "rare circumstance" where the patentee clearly intended to limit the claim to a single data line. For example, claim 10 recites a circuit that supplies a current through a data line. A POSITA would understand that current can be supplied through one or more data lines. Flasck Decl. ¶ 85. Further, claim 16 depends from claim 10 and recites "a single data line." If the patentee intended to limit claim 10 to a single data line, it could have said so. Nor do the specification or prosecution history support disclaimer. The specification gives examples of one or more data lines, and never expressly limits the system to a single data line.

<sup>&</sup>lt;sup>4</sup> All emphasis added unless otherwise noted.

As to the term "through the data line," no further construction is required. The antecedent basis for "the data line" is "a data line," which appears earlier in claim 10.

## E. "before" ('137 patent claim 10) / "after" ('137 patent claim 36)

Term	Solas's Proposed Construction	<b>Defendants' Proposed Construction</b>
"before"	plain and ordinary meaning	earlier in time (not at the same time)
"after"	plain and ordinary meaning	later in time (not at the same time)

The terms "before" and "after" are common English words and readily understandable to a POSITA. It does not require further construction. The Court should not re-characterize it using different claim construction. *See Mentor H/S, Inc. v. Med. Device All., Inc.*, 244 F.3d 1365, 1380 (Fed. Cir. 2001) ("the court properly instructed the jury that these terms should receive their ordinary meanings."). Flasck Decl. ¶¶ 87–92.

Defendants' proposed constructions would transform one-word terms into eight-word phrases with a parenthetical and negative limitation. These constructions are unnecessary, may improperly narrow the claims, and introduce confusion and ambiguity. To the extent Defendants further explain their constructions, Solas will respond.

#### V. <u>DISPUTED TERMS FOR '891 PATENT</u>

A. "a third thin film transistor which during driving its gate through a driving conductor taps a diode driving current at an output of said first current-driving transistor and supplies a current measuring- and voltage regulating circuit, said current measuring- and voltage regulating circuit providing to the data conductor a voltage signal which is dependent on a current measuring result and a voltage comparison" ('891 patent claims 10, 15, 36, 37, 39)

Solas's Proposed Construction	Defendants' Proposed Construction
Plain and ordinary meaning. The claimed "providing" by the current measuring- and voltage regulating circuit ("said current")	The claimed "providing" by the current measuring- and voltage regulating circuit ("said current measuring- and voltage
measuring- and voltage regulating circuit	regulating circuit providing to the data

providing to the data conductor a voltage signal which is dependent on a current measuring result and a voltage comparison") is not required to occur during driving of the third thin film transistor's gate.

conductor a voltage signal which is dependent on a current measuring result and a voltage comparison") is required to occur during driving of the third thin film transistor's gate.

Defendants do not propose an actual construction for this term. The parties' only dispute is whether the claimed "providing" by the current measuring- and voltage regulating circuit ("CMVR circuit") is required to occur during driving of the third thin film transistor's gate. The claim language and intrinsic evidence make clear it is *not.* See Flasck Decl. ¶¶ 93–98.

The first portion of the claim term before the comma describes two functions of the thin film transistor that are performed during driving of the transistor's gate: (1) "taps a diode driving current" and (2) "supplies" a CMVR circuit. The proposition "during" does *not* modify the later "providing" claim language because that language is separated by a comma and constitutes a separate clause and limitation:

"a third thin film transistor which during driving its gate through a driving conductor taps a diode driving current at an output of said first current-driving transistor and supplies a current measuring- and voltage regulating circuit, said current measuring- and voltage regulating circuit providing to the data conductor a voltage signal which is dependent on a current measuring result and a voltage comparison"

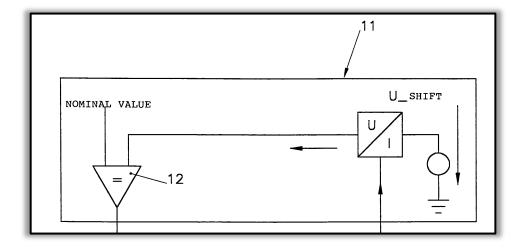
Indeed, Defendant LG Display submitted an IPR petition on the '891 patent that described the disputed term as two separate claim limitations: "[1e.1]" for the language preceding the comma and "[1e.2]" for the language after the comma. *See* '891 IPR Pet. at 45, 48. Further, the proposition "during" modifies the two functions of the *third thin film transistor*. It does not modify the claimed "providing," which is performed by CMVR circuit. This further confirms that the function performed by the CMVR circuit need not occur during driving of the third transistor's gate.

The specification is consistent with the claim language. It describes the tapping and supplying functions of the third transistor that occur during driving of the transistor's gate. *See* '891 patent at 3:8–12. It does not require the claimed "providing" by CMVR circuit to occur during driving of the transistor's gate. There is no disclaimer in the specification or prosecution history that support Defendants' requirement. Defendants' construction should be rejected.

## B. "current measuring" ('891 patent claims 1, 3)

Solas's Proposed Construction	Defendants' Proposed Construction
No construction necessary ("current measuring")	measuring actual current (not voltage)

Just as with Defendants' construction for "gradation current" in the '137 patent discussed above, Defendants' proposal for this term improperly inserts a negative limitation without support in the specification or intrinsic record. Flasck Dec. ¶¶ 99–103. Not only does that risk confusion, it also risks the possibility of excluding the patent's preferred embodiment, as shown below:



This portion of the '891 patent figure shows a current ("I") entering a box labeled "U/I" and a voltage exiting. (The symbol "U" is sometime used for voltage, as evidenced by the patent's discussion of "the voltage source U shift." '891 patent at 3:25–26.) The voltage "U" is then

compared to a "nominal value" voltage in a "voltage comparison" in the "comparator 12." (*Id.* at 2:7, 3:17–18.) '891 IPR Decl. ¶ 76.

Indeed, Defendants' proposed construction does not actually define the term. Indeed, their proposal is to merely *repeat all the words* of the disputed term itself, "current" and "measuring," into the construction verbatim, but then also *add a negative limitation*. That is wrong and invites error. *First*, in merely repeating all the same words of the disputed term, it is clear that both sides agree that no word in the actual disputed claim term requires further construction. Instead, the disputed term obviously has a plain meaning to a POSITA. Flasck Decl. ¶102–03. And controlling law places a "heavy presumption" that the disputed term should carry its "full ordinary and customary meaning[.]" *Epistar Corp.*, 566 F.3d at 1334. Indeed, where a term is used in accordance with its plain meaning, the court should not replace it with different language. *Thorner*, 669 F.3d at 1366-67 ("we do not redefine words. Only the patentee can do that."). As Defendants' own proposal confirms, there is no reason to replace those words, as claim construction is "not an obligatory exercise in redundancy." *U.S. Surgical Corp.*, 103 F.3d at 1568 (Fed. Cir. 1997).

Second, Defendants do not import just any kind of limitations around the words of the actually disputed claim term they import *negative limitations*. But these kinds of importations are disfavored and require specific and clear support from the intrinsic record—in the form of a clear disclaimer or lexicography—that is commensurate with carving out the claim by adding the specific proposed negative limitation. Omega Eng'g, Inc., 334 F.3d at 1322-23 (reversing construction of "periphery" that imported limitation that it "not encompass light striking the center or interior portion of the energy zone," because there was no "express disclaimer or independent lexicography in the written description that would justify adding" the "negative limitation.")

Linear Tech. Corp. v. Int'l Trade Comm'n is instructive. In Linear the lower court construed the phrase "monitoring the current" to exclude "monitoring voltage." 566 F.3d 1049, 1059-60 (Fed. Cir. 2009). But the Federal Circuit reversed. It held that, because there was no clear support from the intrinsic record for "adding the negative limitation—excluding monitoring voltage[,]" the construction was incorrect as a matter of law. Id. at 1060 (citing Omega Eng'g, Inc., 334 F.3d at 1323). The same is true here.

Instead of helping the fact-finder get a sense of some unfamiliar term, Defendants' proposal only adds more words and suggests to the fact-finder that current measurement that also involve the inextricable intertwined concept of voltage are outside the scope of the '891 patent claims. Flasck Decl. ¶ 103. Defendants' extraneous "actual" and their unjustified negative limitation "not voltage" invites error and should be rejected. The plain meaning should apply.

C. "wherein all above mentioned elements of the driving circuit are located at a same side of said light emitting diode" ('891 patent claim 3)

Solas's Proposed Construction	Defendants' Proposed Construction
wherein all above mentioned elements of the driving circuit <u>are electrically connected to and physically located</u> on the same side of the layers of said light emitting diode	wherein all above mentioned elements of the driving circuit <u>are electrically connected to</u> the anode or cathode of said light emitting diode

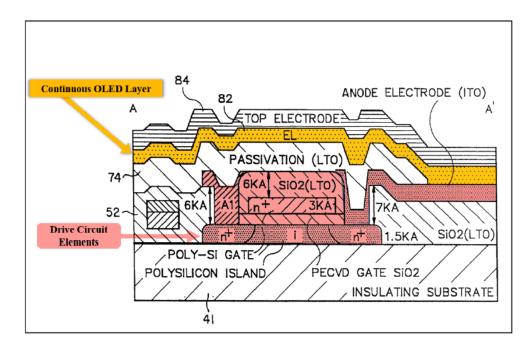
The claim term is "wherein all above mentioned elements of the driving circuit are located at a same side of said light emitting diode." Within this term, the parties' dispute centers on the phrase "located at a same side." Solas's construction maintains the claim's requirement of "located at" and makes clear that the driving elements are *physically* located on the same side of the diode. Defendants' construction reads out "located at" and says nothing about where the drive circuit elements are actually located. *See* Flasck Decl. ¶¶ 104–110.

A POSITA would understand the term to mean "physically located on the same side of the layers of said light emitting diode" in view of the claim language, intrinsic evidence, and extrinsic evidence. Flasck Decl. ¶ 104. A driving circuit as recited in the '891 patent is manufactured as one or more layers. *See* '891 patent at 2:19–26. Further, OLEDs include "one or more layers of organic material [] sandwiched between two electrodes," i.e., an anode a cathode. '173 app. pub.(cited by '891 patent at 1:32–36). Thus, "located on the same side" means that all the drive circuit elements are located on the same physical side of the layers of the diode, i.e., above or beneath the organic layer and on the same side as the anode or cathode.

The plain meaning of the actual claim term "located at" refers to physical location. For example, the English word "locate" means "to set or establish in a particular spot." This is consistent with the plain meaning of "located at a same side of said light emitting diode" in the context of the '891 patent. A POSITA would understand that drive circuit elements and diodes are physical semiconductor components that are arranged in physical locations during manufacture. Indeed, the claim language references physical components by mentioning "contacts" of the "semiconductor material of the diode." Solas's proposal is also consistent with the remaining claim language: "so that no contacts must be guided through a semiconductor material of the diode." A POSITA would understand that if all drive circuit elements are physically located on the same side of the layers of the diode, e.g., beneath or above the organic layer, then no contacts must be guided through the organic layer, i.e., "semiconductor material of the diode."

Defendants attempt to read "located" out from the claim and replace it with different words of their own choosing, even though those different words mean something different than "located at." Their proposal is incomplete because a POSITA would understand that electrical connection and physical location are different concepts. Whereas electrical connections of a driving circuit

are depicted in a circuit diagram (such as in the figure of the '891 patent), a circuit diagram does not depict the physical locations of the driving circuit elements relative to the diode. Indeed, Defendant LG Display filed an IPR petition on the '891 patent confirming that electrical connection and physical location are different concepts. LGD provided the following figure in discussing the "located at a same side" limitation ('891 Pet. at 64):



LGD argued that this shows that "the layers comprising the driving circuit can all be located on the same physical side of the OEL layer (in the figure above, the bottom side." Id. (emphasis added). LGD further argued that a reference's disclosure of its drive elements electrically connected to one side of the diode "would allow placing those drive elements on the same side during manufacture and that no contacts guided through the diode's semiconductor material would be necessary." Id. at 64–65 (emphasis added).

Thus, LGD agreed electrical connection and physical location are different concepts and illustrated how a POSITA would understand the physical layers of the device. Now, the error with Defendants' construction is that it entirely equates "located on the same side" with "electrically

connected to the same side." But there is no lexicography or disclaimer in the specification or prosecution history that would redefine "located at" to mean "electrically connected to." *See* Flasck Decl. ¶¶ 107–110. Although the patentee discussed the relationship between physical location and electrical connection, it never stated that claim 3 only requires electrical connection to the same side. *See id*.

### VI. <u>DISPUTED TERMS FOR '068 PATENT</u>

A. "formed on said plurality of supply lines along said plurality of supply lines" ('068 patent claim 1) "connected to said plurality of supply lines along said plurality of supply lines" ('068 patent claim 13)

Term	Solas's Proposed Construction	Defendants' Proposed Construction
"formed on said plurality of supply lines <i>along</i> said plurality of supply lines"	formed on said plurality of supply lines over the length or direction of said plurality of supply lines	formed on said plurality of supply lines over the length of said plurality of supply lines
"connected to said plurality of supply lines <i>along</i> said plurality of supply lines"	connected to said plurality of supply lines over the length or direction of said plurality of supply lines	connected to said plurality of supply lines over the length of said plurality of supply lines

The '068 patent claims recite "a plurality of feed interconnections" which are "formed on" (claim 1) or "connected to" (claim 13) "said plurality of supply lines along said plurality of supply lines." The parties' sole dispute concerns the meaning of "along." Defendants' construction is that along means "over the length of," whereas Solas's construction is that along means "over the length or direction of." The plain meaning of the claim language, as well as the intrinsic and extrinsic evidence, show that Solas is correct. See Flasck Decl. ¶¶ 111–115.

The plain meaning of "along" is over the length or direction of. Dictionaries define along in precisely this way. *See* Merriam-Webster ("along: 1: in a line matching *the length or direction* of // walking *along* the river; *also*: at a point or points on // a house *along* the river");

Dictionary.com ("along: 1 through, on, beside, over, *or parallel to the length or direction of*; from one end to the other of: *to walk along a highway*."). To say that "I walked along the Mississippi River" does not mean that I walked over the length of the Mississippi River. Rather, it means that I walked in the direction of the Mississippi River over some portion of its length.

The claim language uses "along" consistent with this plain meaning. The claims recite a plurality of feed interconnections "formed on" or "connected to" a plurality of supply lines "along" the plurality of supply lines. A POSITA would understand that the feed interconnections are formed on or connected to the supply lines over the direction of the supply lines. Flasck Decl. ¶¶ 110–115. The claims do not require the feed interconnections to be formed or connected over the length of the supply lines—nor require the feed interconnections and supply lines to be the same length. *Id.* Indeed, based the parties' proposals, the parties agree that feed interconnections are "conductive structures in a layer or layers" and that supply lines are "conductive lines." A POSITA would not understand that conductive structures need to be formed on or connected to conductive lines over the length of those lines. Flasck Decl. ¶¶ 110–115.

The specification also supports Solas's construction. In describing an example of the overall arrangement of the display panel, it states that the feed interconnections and its common connections are provided "*in parallel to*" the supply lines. See '068 patent at 6:26 ("The feed interconnections 90 are provided in parallel to the supply lines Z<sub>1</sub> to Z<sub>m</sub> when viewed from the upper side. The common interconnections 91 are provided in parallel to the signal lines Y<sub>1</sub> to Y<sub>n</sub> when viewed from the upper side."); see also 23:1–6. This shows that the feed interconnections are formed on or connected to the supply lines at particular locations and that those locations are "parallel to" (in the direction of) the supply lines.

Defendants' constructions are incorrect because they are not the plain meaning and because there is no lexicography or disclaimer that requires them. Flasck Decl. ¶ 115. For example, the specification and prosecution history do not redefine "along" to mean "over the length of." Nor do they require the feed interconnections to be formed on or connected to the supply lines over the length of the supply lines. *Id.* Defendants' constructions should be rejected.

## B. "patterned" ('068 patent claims 1, 13)

Solas's Proposed Construction	Defendants' Proposed Construction
formed in one or more layers	formed in a single layer

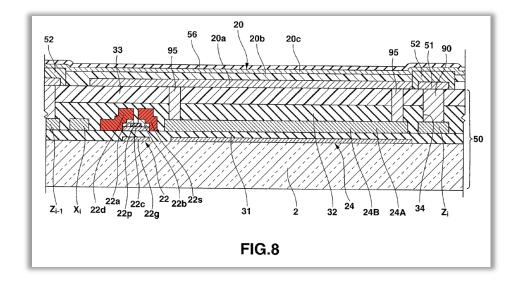
Defendants separately identified the individual word "patterned" as one that supposedly requires construction in addition to identifying the two-word, actually claimed phrase, "patterned together," as a separate term that requires construction. But notably, the word "patterned" does not exist in the claims by itself. Rather, it only shows up as in the two-word claimed phrase "patterned together." Nevertheless, because Defendants split up the term from its two-word phrasing in the actual claim, Solas proposed a construction that crystallizes the dispute and why Defendants must be wrong in their construction of it.

The '068 claims describe driving circuit elements "patterned" together on a substrate. *See* '068 patent, cls. 1, 13. The parties agree that "patterned" must convey, at a minimum, the end result of after those circuit elements are "formed." The only dispute is whether patterning requires forming "in a *single layer*." It does not. The plain meaning of "patterned" is not limited to a single layer. Because there is no lexicography or disclaimer, Defendants' construction should be rejected.

"Patterned" is a known term of art with a plain meaning to a POSITA. Flasck Decl. ¶¶ 116—120, Background. It refers to forming or shaping of semiconductor regions and components using a designed photolithographic process, namely, photolithographic exposure and etching. *Id*.; '068

patterning a conductive film"). This process can be applied to a single layer or to multiple layers, such as a stack. Flasck Decl. ¶ 119. A POSITA would not understand the usage of the term to be limited to designs in a single layer only. This is confirmed by other references in the art, which commonly describe "patterning" multiple layers. '652 patent at 1:57–60 ("In the forming process, *the layers 3 through 5 and 10 . . .* are patterned by dry etching or like methods); '317 patent at 4:64–67 ("By a photolithographic and etching technique, the films 25', 22', and 21' are now patterned to form the [three-layer] gate structure 25,22,21 of FIG. 5."). Thus, a POSITA would understand patterned means "formed in one or more layers" and is not limited to a single layer. *See* Flasck Decl. ¶ 116–120, Background.

The '068 patent uses "patterned" consistent with this plain meaning. As shown in Fig. 5 below, the specification describes a "drain layer" structure that includes drain 22d and source 22c, in which each can be "a layered structure including *two or more layers*."'068 patent at 9:44–49, 8:47–51. Thus, the drain layer is a stack of multiple layers. The specification teaches that the drain layer is patterned, including with photolithography and etching. *See id.* at 9:50–53 ("the drain layer is *patterned*... the *patterned* drain layer is superposed"), 14:46–48 ("The drain layer is sequentially subjected to photolithography and etching to *pattern* the drains 21d, 22d, and 23d, the sources 21s, 22s, and 23s[.]") This confirms that "patterning"—as used in the '068 patent—includes forming one or more layers and is not limited to a single layer.



Thus, Solas's construction is the plain meaning of "patterned" and supported by the intrinsic and extrinsic evidence. Flasck Decl. ¶¶ 116–120. Defendants' construction is not the plain meaning, and there is no lexicography or disclaimer that requires formed in a single layer. *See id.* 

## C. "patterned together" ('068 patent claims 1, 13)

Solas's Proposed Construction	Defendants' Proposed Construction
patterned to fit together	patterned at the same time

The parties' dispute centers on the meaning of "together." Defendants interpret patterned together to mean "patterned *at the same time*," whereas Solas interprets it to mean "patterned to fit together." Thus, the parties dispute whether "together" reflects spatial relationship (in Solas's construction) or a temporal relationship (in Defendants' construction). In addition, Defendants require the patterning to be *simultaneous*.

The plain meaning of claim terms, as well as the intrinsic and extrinsic evidence, show that Solas's construction is correct. Flasck Decl. ¶¶ 121–28. The plain meaning of "together" is into a coherent structure or integrated whole. *Id.*. In this regard, a POSITA's understanding would be consistent with various non-technical definitions of the term as well. *See* Merriam-Webster

Dictionary ("together: 4b: in or into a unified or coherent structure or an integrated whole"); Dictionary.com ("together: 2: into or in union, proximity, contact, or collision, as two or more things: *to sew things together*). The claims uses "together" consistent with this plain meaning. A POSITA would understand "patterned together" to mean that drive circuit elements formed to fit together. Flasck Decl. ¶¶ 121–28.

The '068 specification uses "patterned together" in the same way. It makes clear that "patterned together" means the spatial sense of patterned to fit together, not the temporal sense of patterned at the same time. In one telling example, it describes "conductive lines 51 patterned together with the pixel electrodes 20a by etching a conductive film as the prospective pixel electrodes 20a." '068 patent at 11:11–14. Etching a film for "prospective" (future) electrodes ensures that the conductive lines will fit together when the actual electrodes are formed. This confirms that "patterned together"—as used in this patent—does not refer to the timing of when those elements are formed, but rather the spatial relationship between the conductive lines and pixel electrodes. Thus, Solas's construction is consistent with the plain meaning and supported by the intrinsic and extrinsic evidence. Flasck Decl. ¶¶ 121–28.

Defendants' construction is incorrect because a POSITA would not understand "together" to mean "at the same time" in the context of the '068 patent. *Id.* Nor is there any lexicography or disclaimer that requires this construction. *Id.* To the contrary, the '068 patent expressly teaches patterning a "drain layer" composed of multiple layers. *Id.* A POSITA would know that multiple layers cannot be "formed at the same time." Flasck Decl. ¶¶ 121–28 .Finally, even if "patterned together" somehow referred to time, it should include sequential as well as simultaneous patterning. Defendants' narrow construction is unsupported and should be rejected.

## D. "signal lines" ('068 patent claims 1, 13)

Solas's Proposed Construction	Defendants' Proposed Construction
conductive lines supplying signals	conductive lines supplying <u>a value</u> <u>corresponding to a luminance level</u>

Defendants' proposed construction improperly limits the claims by importing into the term features of the background art or preferred embodiments from the specification. Flasck Decl. ¶¶ 129–31. The parties agree that the "signal lines" are conductive lines and that they supply something. Where the parties depart is in what that *something* is that they must supply.

Solas's construction correctly follows the plain meaning of the term, by requiring that the signal lines supply "signals." Defendants propose a more specific construction, requiring that they supply "a value corresponding to a luminance level." But nothing in the claims mentions "luminance" or suggests that the invention should be limited to supplying luminance signals.

Defendants' construction is not commensurate with the plain meaning of the term. Flasck Decl. ¶¶ 129–31. The insurmountable problem they face with that construction is: nothing in the specification or file history provides a special definition of "signal lines" or a disclaimer that supports Defendants' construction. *See id.* Indeed, the only time that the specification even uses the word "luminance" in the same paragraph as "signal line" is in the background "description of the related art," where it describes a "conventional" prior art display and says "a voltage of level representing the luminance is applied to the gate of the driving transistor through a signal line." '068 patent at 1:38–40. This is not a definition of "signal line," and it does not indicate that "signal line" has a specialized meaning in the patent. *See* Flasck Decl. ¶¶ 130–31. Without clear and unambiguous disclaimer or lexicographic definition by the patentee, courts "do not import limitations into claims from examples or embodiments appearing only in a patent's written

description, even when a specification describes very specific embodiments of the invention or even describes only a single embodiment." *See JVW Enters.*, 424 F.3d at 1335

Defendants' effort to import limitations from prior art or from the preferred embodiments should be rejected, and Solas's construction, grounded in the plain meaning of the term in the context of the claims should be adopted.

## E. "feed interconnections" ('068 patent claims 1, 10, 12, 13, 17)

Solas's Proposed Construction	Defendants' Proposed Construction
conductive structures in a layer or layers that provide connections to a source that supplies voltage and/or current	conductive structures in a layer or layers different from the gates, sources and drains that provide connections to a source that supplies voltage and/or current

The plain meaning of "interconnections" in the context of the '068 patent is a conductive structure in a layer or layers that provides electrical connections between two circuit elements. Flasck Decl. ¶¶ 132–33. As the overlap between the two competing constructions makes clear, the parties essentially agree on this point. The parties' competing constructions also confirm agreement that the "feed interconnections" species of connections provides connections to "a source that supplies voltage and/or current." This is the plain and ordinary meaning of the disputed term. *See id*.

The only remaining dispute concerns Defendant' importation, beyond the plain meaning of the disputed term, that the conductive structures are in "layer or layers" that are "different from the gates, sources and drains." That is inconsistent with the plain meaning of the term. There is no lexicography that compels such extreme narrowing from the plain meaning. And Defendants have not pointed to—and cannot point to—any clear disclaimer of its invention from the prior art to warrant the narrowing it seeks, either. Thus, their construction is incorrect, as a matter of law. Thorner, 669 F.3d at 1365.

Defendants' proposal also could create some confusion based on its importation. Their construction makes it appear as though it is "the gates, sources and drains that provide the connections to a source that supplies voltage and/or current." But it is not; the "conductive structures," which are the feed interconnections, provide those connections.

Dated: March 12, 2020 Respectfully submitted,

#### /s/ Neil A. Rubin

Marc Fenster
CA State Bar No. 181067
Reza Mirzaie
CA State Bar No. 246953
Neil A. Rubin
CA State Bar No. 250761
RUSS AUGUST & KABAT
12424 Wilshire Boulevard, 12th Floor
Los Angeles, CA 90025
Telephone: 310-826-7474

Telephone: 310-826-7474 Email: mfenster@raklaw.com Email: rmirzaie@raklaw.com Email: nrubin@raklaw.com

Sean A. Luner
CA State Bar No. 165443
Gregory S. Dovel
CA State Bar No. 135387
Jonas B. Jacobson
CA State Bar No. 269912
DOVEL & LUNER, LLP
201 Santa Monica Blvd., Suite 600
Santa Monica, CA 90401

Telephone: 310-656-7066 Email: sean@dovel.com Email: greg@dovel.com Email: jonas@dovel.com T. John Ward, Jr.
TX State Bar No. 00794818
Claire Abernathy Henry
TX State Bar No. 24053063
Andrea L. Fair
TX State Bar No. 24078488
WARD, SMITH & HILL, PLLC
PO Box 1231
Longview, Texas 75606
Telephone: 903-757-6400

Telephone: 903-757-6400 Email: jw@wsfirm.com Email: claire@wsfirm.com Email: andrea@wsfirm.com

ATTORNEYS FOR PLAINTIFF, SOLAS OLED LTD.

Case 6:19-cv-00236-ADA Document 68 Filed 03/13/20 Page 35 of 35

**CERTIFICATE OF SERVICE** 

I certify that on March 12, 2020, all counsel of record who are deemed to have consented

to electronic service are being served with a copy of this document via the Court's CM/ECF system

pursuant to Local Rule CV-5(a)(3)(A).

/s/ Neil A. Rubin

Neil Rubin